

LEPIDIUM ORPICULARE (CRUCIFERAE) OF KAUAI

HAWAIIAN PLANT STUDIES 105

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Lepidium orbiculare sp. nov. Fig. 1.

Diagnosis Honotypi: Frutex ramosus ultra 33 cm altus est, novellis glabris, ramulis foliosis 1-3 mm diametro obscure purpureis, ramis vetustioribus 3-6 mm diametro subpurpureis, internodis 1-6 mm longis, nodis non incrassatis, cicatricibus foliorum 3-4 mm latis lunatis subalbis fere prostratis, cicatricibus fasciculorum solitariis, foliis in apice caulinis congregatis, petiolis 15-25 mm longis glabris gracilibus supra canaliculatis, laminis 4.5-7.5 cm longis 1.9-2.9 cm latis viridibus crasse chartaceis oblanceolatis apice subacuto basi cuneata marginibus apiculate humiliiter crenulatis supra in initio proxima midnervum adpresso hirsutulis sed mox glabratris infra glabris nervis secundariis 7-9 in dimidio quoque crebre adscendentibus, panicula 17 \times 10 cm racemis compluribus omnibus minute puberulis, pedicellis 5-7 mm longis, 4 sepalis 0.8 mm longis ovatis varie late oblanceolatis in areola centrali incrassatis et puberulis sed marginibus membranaceis albis, 4 petalis 0.8 mm longis spatulatis albis, 6 staminibus exsertis, filamentis 1 mm longis, antheris 0.2 mm diametro subglobosis, ovario 0.7 mm longo orbiculari, stylo 0.2 mm longo, stigmate 0.2 mm diametro discoideo, capsulis 3.5-4 mm diametro orbicularibus nitidis reticulatis apice rotundato vel paulum emarginato, 2 seminibus 1.3-1.7 mm diametro orbicularibus planatis lucidis subrurribadiis ala pallida membranacea.

Diagnosis of Holotype: Branching shrub, more than 33 cm tall; young shoots glabrous; leafy branchlets 1-3 mm in diameter, dark purple; older stems 3-6 mm in diameter, purplish; internodes 1-6 mm long; nodes not enlarged; leaf scars 3-4 mm wide, lunate, whitish, nearly flush; bundle scar single; leaves clustered at the stem apex; petioles 15-25 mm long, glabrous, slender, channeled above; blades 4.5-7.5 cm long, 1.9-2.9 cm wide, green, thick chartaceous, oblanceolate, the apex subacute, the base cuneate, the margins low apiculate crenulate, above at first appressed hirsutulous by the midrib, but early glabrate, below glabrous, secondary veins 7-9 in each half, strongly ascending; panicle 17 \times 10 cm, of several racemes, all minutely puberulous; pedicels 5-7 mm long; 4 sepals 0.8 mm long, ovate to broadly oblanceolate, thickened and puberulous in the central area, but the broad margins white and membranous; 4 petals 0.8 mm long, spatulate, white; 6 stamens exserted; filaments 1 mm

long; anthers 0.2 mm in diameter, subglobose; ovary 0.7 mm long, orbicular; style 0.2 mm long; stigmas 0.2 mm in diameter, discoid; capsule 3.5-4 mm in diameter, orbicular, shiny, reticulate, the apex rounded or slightly emarginate; seeds 1.3-1.7 mm in diameter, orbicular, flat, shining, reddish brown, with a pale membranous wing 0.1-0.2 mm wide.

Holotypus: Hawaiian Islands, Kauai Island, Haupu, right hand side of Kipu Kai Gap, rocky cliff, Nov. 3, 1916, C. N. Forbes 755.K. (BISH).

Discussion: The closest relative of this novelty is L. serra Mann, also of Kauai, a species with the petals 1 mm long; style 0.4-0.6 mm long; capsule 3.7-4.5 mm in diameter, oblate orbicular; blades 4-13 \times 0.6-4 cm, narrowly lanceolate (or elliptic), the apex acuminate, the margins laciniate serrate.

L. orbiculare has the petals 0.8 mm long; style 0.2 mm long; capsule 3.5-4 mm in diameter, orbicular; blades 4.5-7.5 \times 1.9-2.9 cm, oblanceolate, the apex subacute, the margins low apiculate crenulate. It does not fit into any of the described sections of the genus.

The new epithet is the Latin adjective orbiculare, orbicular, and it is given with reference to the shape of the pods.

i Legend

Fig. 1. Lepidium orbiculare St. John, from holotype.
a, habit X 1; b, raceme, X 1; c, capsule, X 10; d, e, seed, X 10.

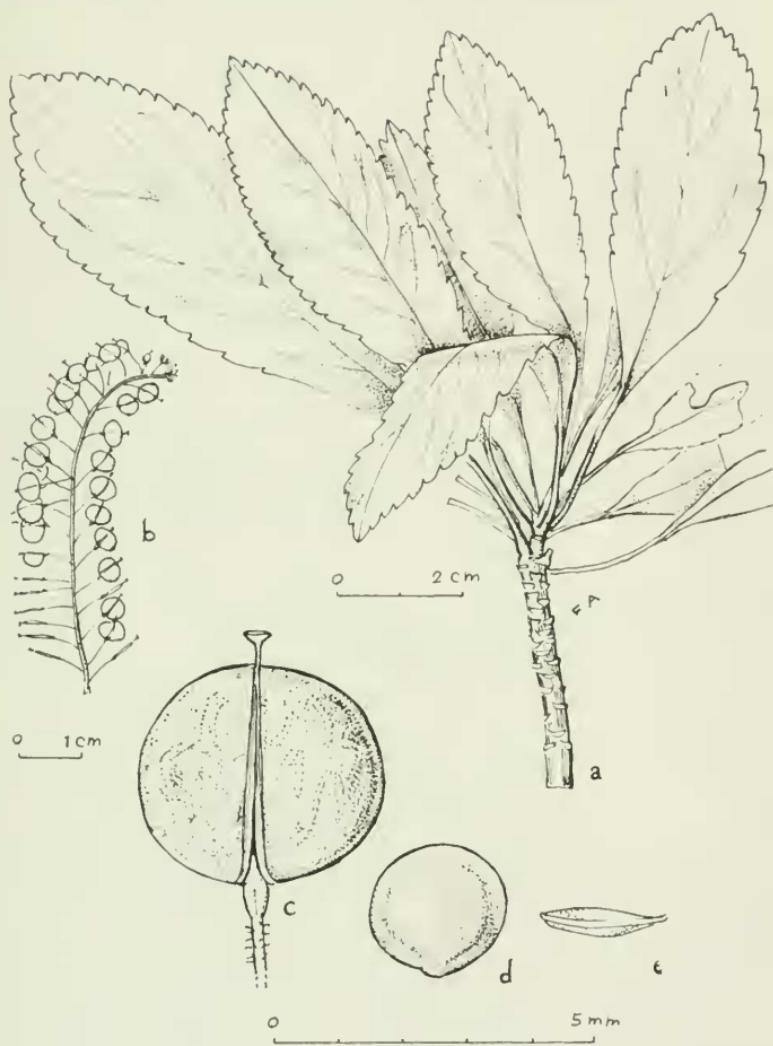


Fig. 1